28 October 2014

Submissions
Electricity Authority
PO Box 10041
WELLINGTON

via email: submissions@ea.govt.nz

Dear Authority

Thank you for the opportunity to provide feedback on the "*Transmission Pricing Methodology Problem Definition Relating to Interconnection and HVDC Assets*" working paper.

Firstly we would like to thank the Authority for taking on board the feedback it has received to date and being prepared to re-look at the problem definition. In our view, the problem definition contained in the working paper represents a significant improvement on the problem articulated in the Authority's 10 October 2012 consultation paper. Our specific comments on the problem definition are located on the following pages.

However, while we think the problems with the current TPM have now been more adequately defined, we remain concerned:

- that the Authority remains wedded to an economic and decision-making framework that we do not believe can be practicably applied to transmission pricing;
- at the lack of a robust cost benefit analysis (CBA).

These are matters we hope the Authority will address in its revised TPM proposal due out next year.

In reviewing this paper, we have reviewed our 1 March 2013 submission on the original TPM proposal and confirm our preferred approach is one that focuses on incremental improvement, namely fixing ACOT payments and the HVDC. At its core, the TPM is a cost allocation matter and should be treated as such.

Yours sincerely

Rory Blundell
Manager Integrated Portfolio

Appendix A Submitter questions

Mark comments in the appropriate question area

Question 1: Do you agree that, in relation to decisions around transmission pricing, the Authority should focus on overall efficiency of the electricity industry for the long-term benefit of electricity consumers? Why or why not?

Yes. To the extent that the Authority has adopted this interpretation, it should apply it consistently.

With respect to the trade-off between dynamic and static efficiency, Contact believes that the trade-off should be determined by a robust CBA, which is also specified in the Authority's interpretation of its statutory objective, not a preference based method.

Question 2: Do you agree with the Authority's view on what constitutes an efficient charge? What role do you consider durability plays in determining efficient charges? Please explain your answers.

Broadly yes. The role of durability is to lower the discount rate individuals and firms use when making investment decisions.

Question 3: Do you agree with the Authority's revised position on the problem definition, described above? Please explain your answer.

Contact agrees that:

- the HVDC and interconnection charges fail to promote efficient investment in transmission, generation and distribution, and by load; and that
- the HVDC and interconnection charges and PDP fail to promote efficient operation of the electricity industry.

Question 4: To supplement information already provided by Transpower, do you have any comments on the steps taken by Transpower or by other parties after approval of the NAaN, NIGU, and other investments such as the LSI Reliability Upgrade investments, to review whether it might have been efficient to postpone elements of them?

No. Contact agrees that the types of incentives described exist. However, we see this as a separate issue to that of cost allocation, which is the TPM's concern.

Question 5: To what extent do current interconnection charges promote efficient timing of investments? Please explain your response.

As noted by the Authority, there are many incentives on all parties charged with providing transmission services. Directionally they seem to fall on the side of investing early due to reputational issues in the event adverse scenarios, no matter how remote, play out. Given these issues will exist in any TPM, an opposing force is required to balance outcomes. The current interconnection charge promotes peak avoidance through the RCPD charge. Any load reduction should flow into demand forecasts and will ultimately provide balance to incentives to invest early, through lower future requirements for transmission. The current interconnection charge therefore, when viewed in the context of the overall investment process, can be thought of as promoting efficient timing of transmission investments.

Question 6: To what extent do you consider participant support for transmission investments takes into account the cost implications for them and for other parties? To what extent do you consider the efforts made by participants to provide relevant information on transmission investments take into account the cost implications for them and for other parties?

In our view, the answer to this question really comes down to resource. As each party has only limited resources, the extent to which one party is able to take into account those matters that do not affect them directly is likely to be more limited than when they are directly affected. However, there have been times where Contact has submitted to the Commerce Commission on matters that do not have a direct impact on Contact but rather on the end consumer, such as whether Transpower should be able to recover the North Island Grid Upgrade over-spend.

Question 7: Do you agree that the Kawerau investment proposal described is an example of an inefficient investment resulting from the TPM? Please explain your answer.

We share the Authority's view in that Contact has not concluded this is an example of inefficient investment.

Question 8: Do you consider that current TPM can incentivise parties to prefer interconnection assets over connection assets or building and owning their own assets (by which they will be required to pay a higher portion of transmission costs)? Please explain your answer and provide any examples you may have.

No comment.

Question 9: Do you agree that the TPM can materially impact investment efficiency? Please explain why or why not.

Contact agrees that a poorly chosen TPM can impact investment efficiency. For example, a methodology that penalises peaking generation or generation in importing regions will drive inefficient investment in transmission. Alternatively, a methodology that rewards load at peak times will also drive inefficient transmission investment.

Question 10: Do you agree that cross-subsidisation of TPM costs between consumers is an important consideration when considering the durability of TPM charges?

We think it is important to first establish what durability is. The Authority defines the following attributes:

1. Can be applied objectively.
2. Can be adapted to changing grid use.
3. Avoids perverse outcomes.

Contact would like to see the following attributes added:

a. Makes sense: A TPM requires some principles that are understandable and resonate with customers.

b. Simplicity: A TPM needs to be simple enough to encourage participation and drive behavioural change.

c. Adaptive to capacity constraints: In general, the method for allocating costs pre and post a major transmission investment should be able to adapt.

At its core, the TPM is a cost allocation matter. While the Authority's points 1 and 2 are admirable attributes, they do not deal with the core durability issue: that there needs to be buy-in to the underlying philosophy of cost allocation. Hence, the additional attributes Contact has set out above. We note that

1. No workable system for avoiding cross-subsidisation has emerged so far, and
2. The lower the per-unit rate firms and individuals face, the less the incentive they have to lobby for change.

Both points suggest an element of cross-subsidisation will not significantly affect durability.

Question 11: Do you consider that the current TPM is durable? Why or why not?

Yes, to the extent that:

1. it makes sense: It is generally understood that consumers are the ultimate beneficiaries of the transmission system and, as in other markets, should pay for the service
2. it is simple: RCPD is easy to understand.
3. it can be adapted: As signalled in Transpower's Operational Review.

However, this does not deal with the legacy issues around the charging of the HVDC, a matter that requires resolution.

Question 12: Do you agree that the examples provided above are examples of a durability problem? Please explain your response.

The current TPM has been criticised by the Electricity Authority (10.5) for not being durable due to ad hoc changes and the operational review by Transpower. In Contact's view, the Authority's review of the TPM that began in early 2012 froze many incremental changes that could be made after a time of significant upgrades (NIGUP and HVDC) as the industry was polarised by the complexity of the SPD methodology.

Question 13: If you consider there to be a durability problem, do you know of any further examples of durability problems with the TPM? If so, please describe. Please also estimate the costs that you have incurred in relation to submissions on the TPM for as far in the past as you are able to provide (ie in relation to current and previous TPMs).

No comment.

Question 14: Do you agree that durability is a particularly difficult problem to measure? Please explain why or why not. Are you aware of an appropriate methodology for measuring durability? If so, please provide details of that methodology.

No comment. No research relating to the difficulty of this problem has been presented.

Question 15: Do you consider that the RCPD allocation provides an efficient signal of the need for load shedding at coincident peak times? Do you agree with the Authority's estimate of the possible efficiency effects?

The issue is whether RCPD signals should be relaxed after a grid investment has occurred (as allowed for in operational reviews). If the answer is yes (see point (c) in our response to question 10), then the present value analysis is incorrect as it assumes ongoing costs of avoiding peaks for 20 years even though a grid investment has occurred, likely increasing capacity far above current requirements due to the nature of transmission investment. If, on the other hand, the RCPD signal is muted, as Transpower suggests in its operational review, immediately following the transmission investment there would be a net benefit of $1 million, even using the excessive $1000/MWh charge suggested.

We suspect the $1000/MWh value is overstated as in Concept's analysis this represents the value to the network owner, which, due to their regulated ability to recover costs, may not represent the value to the customer, assuming customers were asked to put a value on it.

Question 16: Do you agree that the interconnection charge may over-signal the need for overall reductions in consumption? Do you agree with the Authority's estimates of inefficiency? Which of the four scenarios, if any, do you consider the most plausible? Please explain your answer.

We have interpreted this question with respect to over-signalling due to issues of elasticity versus over-signalling due to the overall rate (which is outside of the Authority's control).

While we await the full CBA at a high level, the approach suggested is at odds with the desired durability attribute of "can be applied objectively" and should not be pursued on this basis.

Question 17: Do you agree that the interconnection charge may over-signal the cost of increasing Tiwai smelter production in summer? Do you agree with the Authority's inefficiency assessments? Please explain why or why not.

We agree that the current charge over-signals the cost of NZAS increasing production in summer. However this issue can be resolved as part of Transpower's operational review and is therefore not a "problem" with the current TPM.

Question 18: Do you agree that the interconnection charge and ACOT payments may over-signal the value of embedded generation? Please explain your answer.

Yes. In Contact's view, ACOT payments (as they stand) are not promoting efficient outcomes and may over-signal the value of embedded generation.

In Contact's view, ACOT payments have:

- had little, if any, effect on reducing Transpower's transmission investment requirements
- resulted in an additional $50 million of transmission charges being passed through to consumers with no material reduction in transmission spend
- led to perverse incentives, where owners of embedded generation actually benefit from rising transmission costs. This undermines the increased scrutiny of the transmission investment argument that the Authority has used to justify changes to the TPM as these parties are always incentivised to argue for additional transmission investment.

The quantum, at ~$50 million p.a., is an excessive cost allocation that, in our view, if was more widely understood would undermine confidence in the TPM.

Question 19: Do you agree with the Authority's assessment that, although the interconnection charge may over-signal the value of generation to direct-connect consumers, any resulting efficiency loss is likely to be relatively small? Please explain your answer.

It is a telling conclusion the Authority makes; the reason why the efficiency loss is small is because more money can be made out of ACOT, i.e. you can make higher returns by a quirk in the current TPM than by investing in your business.

Question 20: Do you agree that the HAMI allocation may incentivise SI generators to withhold existing capacity? Do you agree with the Authority's estimate of inefficiency? Please explain your answer.

As we have stated previously, the HAMI is the only reason Contact withholds existing capacity.

We do not agree with the Authority's estimate as Transpower has carried out a more thorough analysis as part of its operational review. Accordingly, we refer you to: https://www.transpower.co.nz/sites/default/files/uncontrolled_docs/Market-impact-analysis-HVDC-MWh-charge.pdf

Question 21: Do you agree that the HAMI allocation may discourage upgrades to SI generation capacity? Do you think this is a material problem? Please explain your answer.

In Contact's view, this seems secondary to withholding capacity.

Question 22: Do you agree that the HVDC charge may discourage investment in SI grid-connected generation? Do you agree with the Authority's inefficiency estimate? Please explain your answer.

Yes, we agree the HVDC charge may discourage investment in SI grid-connected generation.

We also agree that the inefficiency may be limited due to the current environment and also agree with the Authority's observation that nodal pricing implications are a key factor in generation investment decisions.

Question 23: Do you agree that the HVDC charge may bring forward the need for upper SI transmission investment? Do you agree with the Authority's estimate of inefficiency? Please explain your answer.

No comment.

Question 24: Do you agree with the Authority's view on prudent discount policy? Do you agree with Transpower's view that a PDP for notional generation is not practically achievable because of the difficulties in valuing notional disconnection? Please explain your answer.

Contact continues to hold the view that, due to the nature of industrial load and its requirements around security of supply, industrial load will not disconnect from the grid.

Question 25: Do you consider that there are any other material problems with the TPM (in particular, the HVDC charge, interconnection charge, and the prudent discount policy) that the Authority has not considered in this paper? If so, please provide details.

No.